R E M A R K S

This is a full and timely response to the Office Action mailed September 7, 2007.

Applicants believe that the currently pending claims are not anticipated by or obvious over the cited references for at least the reasons set forth below and respectfully request reconsideration.

Claim Rejections – 35 U.S.C. 102(b)

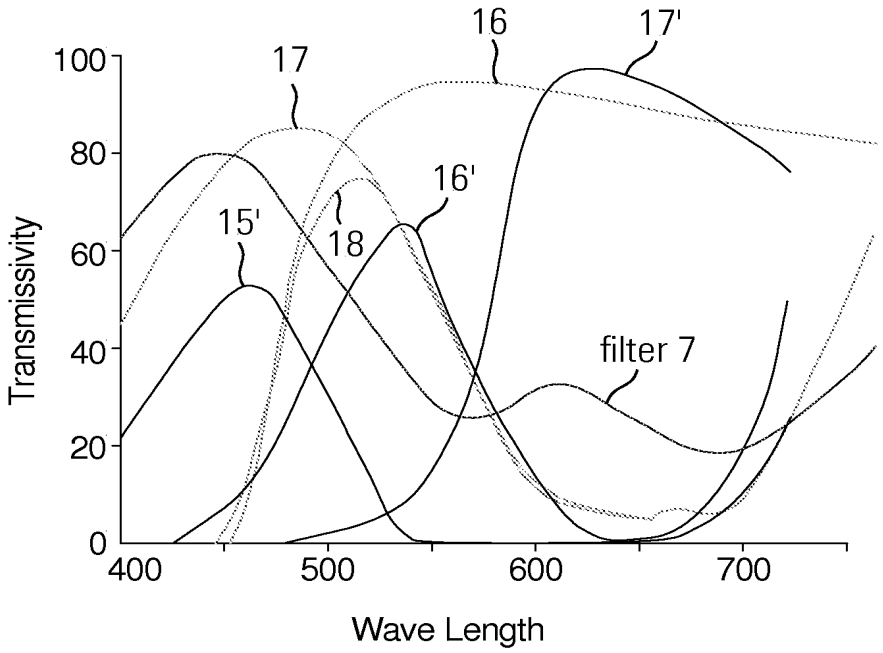
Claims 1, 2 and 4-6 have been rejected under 35 U.S.C. 102(b) as being anticipated by Suda, U.S. Patent No. 5,166,784. Applicants believe that the currently pending claims are allowable over Suda at least because Suda does not disclose or suggest that the "first trim filter transmission function is selected to selectively block light at edges of at least one of said first and second bands of wavelengths that is not blocked by said primary filter layer transmission function, whereby said primary filter layer and said first trim filter together have a target transmission function transmitting a desired set of wavelengths."

The Examiner has read the trimming functionality of Applicants' claims into Suda's filter 7 based on a comparison of portions of Suda's FIGS. 10 and 12. Specifically, the Examiner indicates that the minimum in the transmission curve of filter 7 attenuates wavelengths along the falling edge of curve 16' and the rising edge of curve 17'. While this is true, it considers only a small portion of the transmission curve of filter 7 as compared to FIG. 10, ignoring the rest, and ignoring filter 7's application to FIG. 4 as also taught by Suda. More importantly, it ignores the explicit teaching

of Suda about the purpose and functionality of filter 7. Applicants respectfully disagree that Suda's wavelength vs transmissivity plots have sufficient detail or clarity to use as a basis for attributing purpose and functionality in this way. Applicants believe rather that the explicitly stated purpose and function given by Suda in the detailed description for Suda's filter 7 should be relied on, instead of ignoring Suda's explicit description and relying on comparisons of portions only of multiple plotted curves. Suda is silent as to the purpose for the specific shape of the transmission curve of filter 7, stating only that filter 7 is a "bluish filter" (col. 9, line 15) and that "[t]he transmissivity characteristics of the spectral distribution correction filter 7 are determined to minimize the output differences corresponding to the colors of the color separation filters in the sensor according to the transmissivity characteristics of the color separation filters in the solid-state color image sensor and the spectral sensitivity characteristics of the photoelectric transducer elements." (Col. 9, lines 30-37) The problem being solved by Suda using filter 7 is to normalize the spectral sensitivity levels of the three color sensors, as discussed at col. 8, line 55 to col. 9, line 8. The cyan sensor output is lower than the green sensor output, which is lower than the yellow sensor output. Suda teaches that amplifiers may be used to correct this imbalance, but that it becomes complicated. Suda teaches the use of filter 7 as the preferred alternative to amplifiers to solve this problem. Clearly, Suda does not disclose filter 7 to be a trim filter as in Applicants claims.

To illustrate the inutility of trying to interpret portions of Suda's plots to read Applicants claimed trimming functionality into filter 7, the plots of Suda's figures 4, 10 and 12 have been combined in a single figure shown below. The

axes have been scaled so that the plots could be correctly superimposed.



The green plot lines 16, 17 and 18 are taken from Suda's FIG. 4, wherein line 16 is the transmissivity of a yellow filter 533, line 17 is the transmissivity of a cyan filter 531, and line 18 is the transmissivity of a green filter 532 (being a combination and thus a product of the yellow and cyan filters 533 and 531). The black plot lines 15', 16' and 17' are taken from Suda's FIG. 10. (Suda does not give a definition of what colors each of the black plot lines 15', 16' and 17' are.) The blue line is the transmission curve of filter 7 taken from Suda's FIG. 12.

Applicants take particular note that Suda teaches that the filter 7 can be used **both** with the cyan, yellow and green filters of FIG. 4, or the red, green and blue filters of FIG. 10:

"As shown in FIG. 11, the spectral distribution correction filter 7 is arranged in the optical path. In this embodiment wherein the original illumination lamp having the spectral distribution (FIG. 3) of the light emitted from the lamp, **the color separation filters having the transmissivity curves (FIG. 4), and the photoelectric transducers having the spectral sensitivity curve (FIG. 5) are used, the filter having the transmissivity curve in FIG. 12 is used.**"
(Suda, col. 9, lines 6-15, emphasis added)

"If the lamp having the characteristics (FIG. 3), **the color separation filters having the characteristics (FIG. 10), and the photoelectric transducer elements having the characteristics (FIG. 5) are used, the spectral distribution correction filter 7 may have the transmissivity characteristics in FIG. 12.**"
(Suda, col. 9, line 66 - col. 10, line 3, emphasis added)

Thus, Suda's filter 7 is not tailored for particular use with the transmissivity patterns of either set of filters, despite the fact that Suda's two sets of filters (from FIG. 4 and FIG. 10) have substantially different transmissivity patterns. Applicants therefore respectfully believe that it is completely wrong to ignore Suda's explicitly stated purpose and functionality for filter 7 and try to read in a different purpose corresponding with Applicants claims based on a comparison of one portion of Suda's FIG. 12 with Suda's FIG. 10. For example, if Suda's filter 7 is used with the filters of FIG. 10, the 560nm minimum of filter 7's transmission curve does line up with the falling edge of curve 16' and the rising edge of curve 17', as noted by the Examiner. However, filter 7 has an amplifying, not trimming, effect on the 500nm rising

edge of curve 16'. When Suda's filter 7 is used with the filters of FIG. 4, it has asymmetrical affects on curves 16, 17, and 18, rather than the trimming function of Applicants claims, despite Suda's teaching that filter 7, with the transmissivity curve of FIG. 12, can be used with the filters of FIG. 4.

Again, the explicit teaching of Suda regarding filter 7 is "The transmissivity characteristics of the spectral distribution correction filter 7 are determined to minimize the output differences corresponding to the colors of the color separation filters in the sensor according to the transmissivity characteristics of the color separation filters in the solid-state color image sensor and the spectral sensitivity characteristics of the photoelectric transducer elements." Even if one portion of Suda's transmissivity pattern for filter 7 happens to trim one portion of an edge of a color band when used with the Suda's filters of FIG. 10, the transmission function of Suda's filter 7 is **not** "selected to selectively block light at edges of said first and second bands of wavelengths that is not blocked by said primary filter layer transmission function" as in Applicants claim 1. Suda explicitly states that filter 7 is designed for a completely different purpose, and a complete consideration of the transmission curves of filter 7 with the filters of FIG. 4 and FIG. 10 confirms that Suda's filter 7 is not a trim filter as in Applicants claims.

Claims 2 and 4-6 depend ultimately upon independent claim 1 which is allowable over the cited art as discussed above. These dependent claims are likewise in condition for allowance at least because they depend on an allowable independent claim. However, dependent claims 2 and 4-6 are independently allowable at least in that they recite particular features which, when combined with the elements of the independent

claim, are also not disclosed or suggested in the cited references.

Claim Rejections - 35 U.S.C. 103(a)

Claims 3 and 7-11 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Suda. Independent claim 8 includes the same limitation with respect to the filtering characteristic of the trim filter as claim 1, and the arguments for allowability set forth above with respect to claim 1 are repeated regarding amended claim 8. Suda's filter 7 does not have the same filter characteristics and is not used for the same purpose, that is, it does not trim the edges of the transmission functions for the primary filter.

Claims 3, 7 and 9-11 depend upon independent claims which are allowable over the cited art as discussed above. These dependent claims are likewise in condition for allowance at least because they depend on allowable independent claims. However, dependent claims 3, 7 and 9-11 are independently allowable at least in that they recite particular features which, when combined with the elements of the independent claims, are also not disclosed or suggested in the cited references.

In view of the above, all of the claims are believed to be in condition for allowance, and Applicants respectfully request that a timely Notice of Allowance be issued.

Respectfully submitted,
KLAAS, LAW, O'MEARA & MALKIN, P.C.

By: /Guy K. Clinger/

Guy K. Clinger, Esq.
Registration No. 42,422
1999 Broadway, Suite 2225
Denver, CO 80202
(303) 298-9888
Fax: (303) 297-2266